

Figure 1

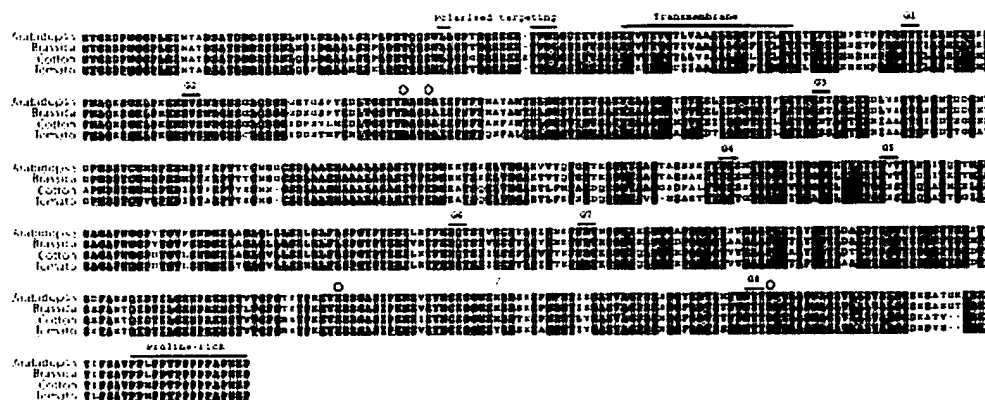


FIGURE 2

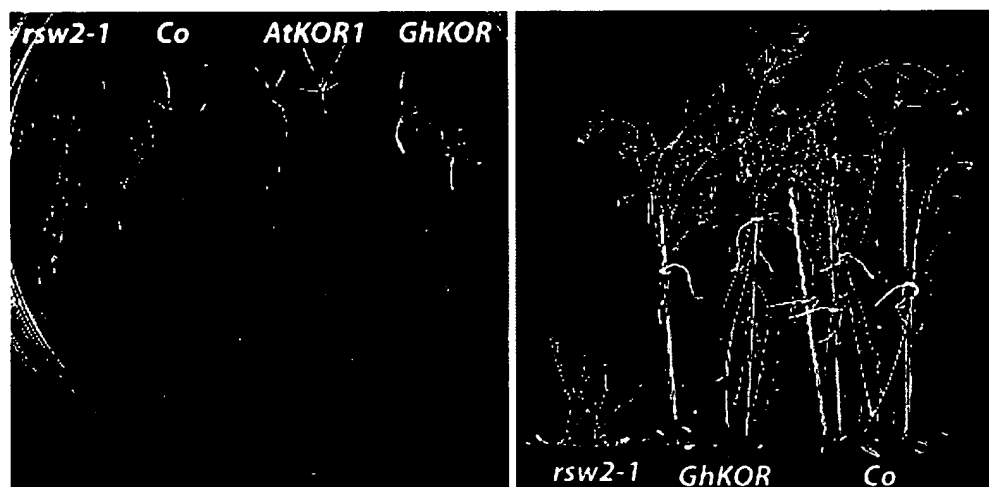


Figure 3



Figure 4

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Arabidopsis 1 -----MS--AGVSAACVCSO-----LSWKKEKFTSCDQTPFCRAR---SRTPGA--CSLIVGDVSTIGDGLVAKLLPAEPHQCGDQDQIEPLILSLSVTKYDGLVLLKIDEDSLN
Genbank 1 -----MS--AGVSAACVCSO-----LSWKKEKFTSCDQTPFCRAR---SRTPGA--CSLIVGDVSTIGDGLVAKLLPAEPHQCGDQDQIEPLILSLSVTKYDGLVLLKIDEDSLN
Mouse 1 -----MS--AGVSAACVCSO-----LSWKKEKFTSCDQTPFCRAR---SRTPGA--CSLIVGDVSTIGDGLVAKLLPAEPHQCGDQDQIEPLILSLSVTKYDGLVLLKIDEDSLN
Pest 1 -----MS--AGVSAACVCSO-----LSWKKEKFTSCDQTPFCRAR---SRTPGA--CSLIVGDVSTIGDGLVAKLLPAEPHQCGDQDQIEPLILSLSVTKYDGLVLLKIDEDSLN

Arabidopsis 104 PPKKRFQVPDVTSSVSEKKIKLQKVATE---TISGDTSPSSVTVSDGYKAVVNDP---FVTVR-----EKSGDRRVVS
Genbank 104 PPKKRFQVPDVTSSVSEKKIKLQKVATE---TISGDTSPSSVTVSDGYKAVVNDP---FVTVR-----EKSGDRRVVS
Mouse 104 PPKKRFQVPDVTSSVSEKKIKLQKVATE---TISGDTSPSSVTVSDGYKAVVNDP---FVTVR-----EKSGDRRVVS
Pest 104 PPKKRFQVPDVTSSVSEKKIKLQKVATE---TISGDTSPSSVTVSDGYKAVVNDP---FVTVR-----EKSGDRRVVS

Arabidopsis 176 LNSGGLFDPFQLG-----KTEGDNWKKFRTTDSAPSPQOSISFVDSFVTCIPENATEFALPKEGPGVER--SEPTALVELQVTEPHNSPGLTGSIPFVSEKCKGTS
Genbank 176 LNSGGLFDPFQLG-----KTEGDNWKKFRTTDSAPSPQOSISFVDSFVTCIPENATEFALPKEGPGVER--SEPTALVELQVTEPHNSPGLTGSIPFVSEKCKGTS
Mouse 176 LNSGGLFDPFQLG-----KTEGDNWKKFRTTDSAPSPQOSISFVDSFVTCIPENATEFALPKEGPGVER--SEPTALVELQVTEPHNSPGLTGSIPFVSEKCKGTS
Pest 176 LNSGGLFDPFQLG-----KTEGDNWKKFRTTDSAPSPQOSISFVDSFVTCIPENATEFALPKEGPGVER--SEPTALVELQVTEPHNSPGLTGSIPFVSEKCKGTS

Arabidopsis 288 GFTVLAARHQIDVLANGWANGS-----TSLPSSSHRIDTNNRAGIVTTFVVRPKDVTQKASVTTTSANQOLATQYQCHNTKDESDYAGPDSKYDESDIPYDVLNDE
Genbank 288 GFTVLAARHQIDVLANGWANGS-----TSLPSSSHRIDTNNRAGIVTTFVVRPKDVTQKASVTTTSANQOLATQYQCHNTKDESDYAGPDSKYDESDIPYDVLNDE
Mouse 288 GFTVLAARHQIDVLANGWANGS-----TSLPSSSHRIDTNNRAGIVTTFVVRPKDVTQKASVTTTSANQOLATQYQCHNTKDESDYAGPDSKYDESDIPYDVLNDE
Pest 288 GFTVLAARHQIDVLANGWANGS-----TSLPSSSHRIDTNNRAGIVTTFVVRPKDVTQKASVTTTSANQOLATQYQCHNTKDESDYAGPDSKYDESDIPYDVLNDE

Arabidopsis 402 STDGKATPFDWVLPVPHPEKHQKILAAKGRNVTIVDPRIKRDSTVLEKATONGTYYEDSGKD--FDGNTGQSSSYDMLSPKIKKGGAFSTKTVGTPPSITTESDNEPSTVA
Genbank 402 STDGKATPFDWVLPVPHPEKHQKILAAKGRNVTIVDPRIKRDSTVLEKATONGTYYEDSGKD--FDGNTGQSSSYDMLSPKIKKGGAFSTKTVGTPPSITTESDNEPSTVA
Mouse 402 STDGKATPFDWVLPVPHPEKHQKILAAKGRNVTIVDPRIKRDSTVLEKATONGTYYEDSGKD--FDGNTGQSSSYDMLSPKIKKGGAFSTKTVGTPPSITTESDNEPSTVA
Pest 402 STDGKATPFDWVLPVPHPEKHQKILAAKGRNVTIVDPRIKRDSTVLEKATONGTYYEDSGKD--FDGNTGQSSSYDMLSPKIKKGGAFSTKTVGTPPSITTESDNEPSTVA

Arabidopsis 521 GPEVTHPADALVQGVHRESEVHAQTOTPHMATSGLVNRSEKQDRFFVLSRAIFPQRTQYCAITGHTAKKELVADIMILTLGLTITTSRANIGTTCHEPPELLVNTVQAGAT
Genbank 521 GPEVTHPADALVQGVHRESEVHAQTOTPHMATSGLVNRSEKQDRFFVLSRAIFPQRTQYCAITGHTAKKELVADIMILTLGLTITTSRANIGTTCHEPPELLVNTVQAGAT
Mouse 521 GPEVTHPADALVQGVHRESEVHAQTOTPHMATSGLVNRSEKQDRFFVLSRAIFPQRTQYCAITGHTAKKELVADIMILTLGLTITTSRANIGTTCHEPPELLVNTVQAGAT
Pest 521 GPEVTHPADALVQGVHRESEVHAQTOTPHMATSGLVNRSEKQDRFFVLSRAIFPQRTQYCAITGHTAKKELVADIMILTLGLTITTSRANIGTTCHEPPELLVNTVQAGAT

Arabidopsis 641 PPTFGHANSPTKRPFLVGRHNTLMDAISTTLLPTTFLAKANVTQVVPVLPKXFPQRLATFSDNRAVVG--SGLVVOGYTKTQTQASVFLPG--KSNWYDLNCKTIVGCK
Genbank 641 PPTFGHANSPTKRPFLVGRHNTLMDAISTTLLPTTFLAKANVTQVVPVLPKXFPQRLATFSDNRAVVG--SGLVVOGYTKTQTQASVFLPG--KSNWYDLNCKTIVGCK
Mouse 641 PPTFGHANSPTKRPFLVGRHNTLMDAISTTLLPTTFLAKANVTQVVPVLPKXFPQRLATFSDNRAVVG--SGLVVOGYTKTQTQASVFLPG--KSNWYDLNCKTIVGCK
Pest 641 PPTFGHANSPTKRPFLVGRHNTLMDAISTTLLPTTFLAKANVTQVVPVLPKXFPQRLATFSDNRAVVG--SGLVVOGYTKTQTQASVFLPG--KSNWYDLNCKTIVGCK

Arabidopsis 759 THKMDAPKESIPAKAGTIFPKDRFRRASSQNDWPTTAVVLAHSS--QARSGEYIEDCKSTFE--RGSYTHRFVFGKGLVFTN-----LAPPEARLSQCLIDRIILLGSSGP
Genbank 759 THKMDAPKESIPAKAGTIFPKDRFRRASSQNDWPTTAVVLAHSS--QARSGEYIEDCKSTFE--RGSYTHRFVFGKGLVFTN-----LAPPEARLSQCLIDRIILLGSSGP
Mouse 759 THKMDAPKESIPAKAGTIFPKDRFRRASSQNDWPTTAVVLAHSS--QARSGEYIEDCKSTFE--RGSYTHRFVFGKGLVFTN-----LAPPEARLSQCLIDRIILLGSSGP
Pest 759 THKMDAPKESIPAKAGTIFPKDRFRRASSQNDWPTTAVVLAHSS--QARSGEYIEDCKSTFE--RGSYTHRFVFGKGLVFTN-----LAPPEARLSQCLIDRIILLGSSGP

Arabidopsis 871 KSALEPLNQKAKIKMOPLMGOLVASSQTVLTIKRGVVDQDWTYKIL
Genbank 871 KSALEPLNQKAKIKMOPLMGOLVASSQTVLTIKRGVVDQDWTYKIL
Mouse 871 KSALEPLNQKAKIKMOPLMGOLVASSQTVLTIKRGVVDQDWTYKIL
Pest 871 KSALEPLNQKAKIKMOPLMGOLVASSQTVLTIKRGVVDQDWTYKIL

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Figure 5

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Arabidopsis 1  MTVTHLHPLVILGQVIAAAGAAVAVIAPPNDPFLQISPDQNTYSSSSK--IKKDGKKPTKAQLADDPDSSPTDSDGSACTPCKTCYHAQSPVILFSSRYVDCDCD
rice 1  MTVTHLHPLVILGQVIAAAGAAVAVIAPPNDPFLQISPDQNTYSSSSK--IKKDGKKPTKAQLADDPDSSPTDSDGSACTPCKTCYHAQSPVILFSSRYVDCDCD
mouse 1  MTVTHLHPLVILGQVIAAAGAAVAVIAPPNDPFLQISPDQNTYSSSSK--IKKDGKKPTKAQLADDPDSSPTDSDGSACTPCKTCYHAQSPVILFSSRYVDCDCD
yeast 1  MTVTHLHPLVILGQVIAAAGAAVAVIAPPNDPFLQISPDQNTYSSSSK--IKKDGKKPTKAQLADDPDSSPTDSDGSACTPCKTCYHAQSPVILFSSRYVDCDCD

Arabidopsis 119 GSDETDGHSVSCQNTCWAAGAAARENLKKIETYNQGLVIRQIEQAKVGLKDAARLAKLKSQKILKGLVDQCKDRKEQIEKVEKKEHLQKKEEK-EKKRRLAAQQCK--GDAREK
rice 108 GSDETDGHSVSCQNTCWAAGAAARENLKKIETYNQGLVIRQIEQAKVGLKDAARLAKLKSQKILKGLVDQCKDRKEQIEKVEKKEHLQKKEEK-EKKRRLAAQQCK--GDAREK
mouse 102 GTDETHSGTVCEHTCKEKGKESLQQLAEVTRQFLEKILIKRWKTARNEKQSKLLELQAGKSLSDQVETRAAKKEAERPEKEAKDQKRLWEEQQAARREQERAAAPQEL
yeast 111 GSD--ESLICKPHTCAQKAREYLALEEHNRLVKNGLKIRKQWALESAKKTDEVKARYKISDSLVASAKETQSKVEKKEKRSYDLGARAVLPDQDLRVLLSLVDER----NEM

Arabidopsis 236 TDOSKKVESSSHDEGTPAVSQHDETHHDIENYKDYPSDEKPAAREGPTSLDRAHTHTNPADEHVYKKEESTSSBDSSTPDESQNDGSAKKEESDEKVKVEDVTEKKEELKEELG
rice 228 VDSQENHETVQDESKVABHHDGHATSHDNHT----PESSESVQHDPEQDDISIAKAPADESPPTSAAPTARQSTPADS-----EGLSREELG
mouse 222 DDNDGHSVSLAKLQTHPELDYDGDGALSKEE----AQALLSGDTQTDTSTFDYVAAIHRYRSEVPTDIPVETEPKE-----EAPP
yeast 224 QERLDILTHLLDLTLLETDFKDFSTKKAELS----FEDLKEQRIARKVSSDDVENTLESCHNLSMLTGPSEDITPSSLIND-----IK

Arabidopsis 356 RLVASRWTKKSKDKPTADDIPKADQENHETPTITAEAD----EDDGVSVDGDEDTSDGKYSDHEKPEDDSYERETRHS---SSYKSDADDVD--PSETTSN--PTWLEKIQTIV
rice 317 RLVASRWTKKSKDKPTADDIPKADQENHETPTITAEAD----EDDGVSVDGDEDTSDGKYSDHEKPEDDSYERETRHS---SSYKSDADDVD--PSETTSN--PTWLEKIQTIV
mouse 304 VLPPTREKKEKPEKKEKKEKKEKAPPPQPPQPPPT----EKKKPPYDEK-----
yeast 306 KILNSLVNNKLSLNGILSPASSTPLTDSK-----

Arabidopsis 465 KNILLAVNLPQTTVDKSEADRVKKEYDESSKLNKIQSRISLKKKLKQDPQPEKEFTSPHGRCYKSKQKPTTAVCAKREATQ--EGYKTRLQWDFKENS---TQPMSTNGEK
rice 436 QNVLRTPNFYKT-PVDLSEASRVKKEYDDASKLSKIQSRISTYDRLKNDPQKKEKFTYPTDQCTSEKKGATVAVCPFKKASQV--EGHSTSLQWDFKENS---TRVQPSNGDR
mouse 357 -----QAIIDAAQKRSKYVEVERSLKKEESSIRSLQKISPDQPSGKFAYLTSQCTLTNEVRLCPFKLVGQPKKHGSPSLQWGSWAGPDHDXPSAMKYSQGTG
yeast 340 -----YRFRAAQRDLDAATENKSLKKESTKLKHELSYHHQ-WDLTRAIKMETKREIGGTAVVYTERVVPD-----SILLQWASQEGN---VLATKNGQS

Arabidopsis 579 CWNQPDRLKYLKGLANLMDVDKPSRCTYAAILSTPARCLEDKLKLQKLEKLMQDKP-----QNHDEL
rice 549 CWNQPDRLKYLKGLANLMDVDKPSRCTYAAILSTPARCLEDKLKLQKLEKLMQDKP-----QNHDEL
mouse 464 CWNQPDRLKYLKGLANLMDVDKPSRCTYAAILSTPARCLEDKLKLQKLEKLMQDKP-----QNHDEL
yeast 431 CWNQPDRLKYLKGLANLMDVDKPSRCTYAAILSTPARCLEDKLKLQKLEKLMQDKP-----QNHDEL

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Figure 6

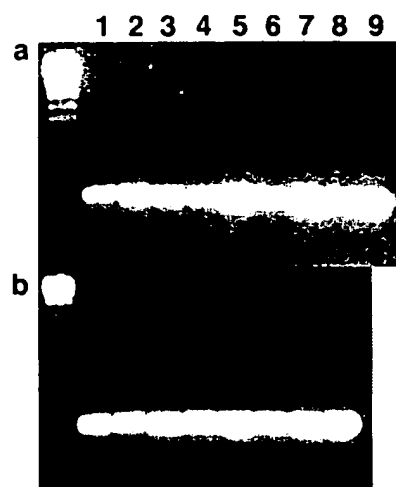


Figure 7

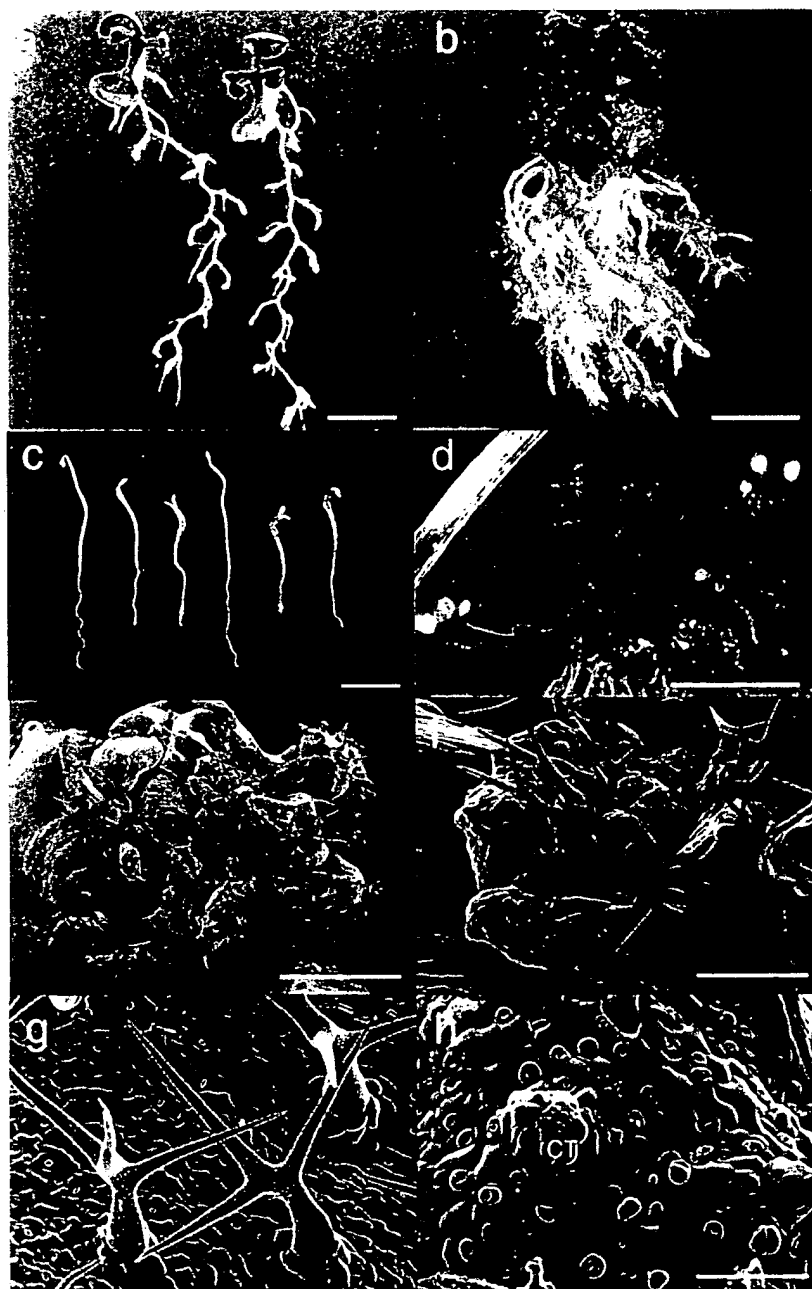


Figure 8

